

G C C C C A G G G C C T G G A G A G G T C T G A A G A A A C C T G G G A G C C A G C A G C C C G G G C T C A C T C T G G G T T C T G A A G C C C A T T C 79
 C C T G C T C T G C G G C T C C T C C C A C C C A C C T C T T C T C A G C C C T C C A G C T C A A G G G T T G A T C T C A G G A G T C C A G G A C C C A G G 158
 A G A G G G A A G A A T C T G A G G A A C A C A G A A C A G T G A G C C T T G C C C A C A C C C C A T C T C C C C T C A C C A C A T C T C C C C T C A C C C T 237
 C A C C C T C C C T G C C T G G C C C T G G A C C C A T C C C A G G A C C T C C C T A T C A G C T G A C T T C T T C C A G T G T C T T G C A G G C C C C T C 316
 T G G G C T C C T C C C T C C C T G G C T T T C C T A C C A C T C C C C C T C T A T C G G C G T C T A T C T G T A G G T G C C C T G G G A T T T A T A A A 395
 A C T G G G T T C C G A A T G C T G A A T A A G A G A C G G T A A G A G C C A G G C A A A G G A C A G C A C T G T T C T C T G C C T G C C T G A T A C C C T 474

 C A C C A C C T G G G A A C A T C C C C C A G A C A C C C T C T T A A C T C C C G G A C A G A G A T G G C T G G C G G A G C C T G G G G G C 7
 R L A C Y L E F L K K E E L K E F Q L L 27
 C G C C T G C C C T G T T A C T T G G A G T T C C T G A A G A A G G A G G A G C T G A A G G A G T T C C A G C T T C T G 603
 L A N K A H S R S S S G E T P A Q P E K 47
 C T C G C C A A T A A A G C C C A C T C C A G G A G C T C T C G G T G A G A C A C C C G C T C A G C C A G A G A A G 663
 T S G M E V A S Y L V A Q Y G E Q R A W 67
 A C G A G T G G C A T G G A G G T G C C T G T A C C T G T G G T C A G T A T G G G G A G C A G C G G C C C T G G 723
 D L A L H T W E Q M G L R S L C, A Q A Q 87
 G A C C T A G C C C T C A T A C C T G G A G C A G A T G G G C T G A G G T C A C T G T G C C C C A A G C C C A G 783
 E G A G H S P S F P Y S P S E P H L G S 107
 G A A G G G C A G C C A C T C T C C C T C A T T C C C T A C A G C C C A A G T G A A C C C C A C C T G G G T C T 843
 P S Q P T S T A V L M P W I H E L P A G 127
 C C C A G C C A A C C C A C C C A C G T G C T A A T G C C C T G G A T C C A T G A A T T G C C G C G C G G G 903
 C T Q G S E R R V L R Q L P D T S G R R 147
 T G C A C C C A G G C C A G A G A A G G G T T T G A G A C A G C T G C C T G A C A C A T C T G G A C G C C G C 963
 W R E I S A S L L Y Q A L P S S P D H E 167
 T G G A G A G A A T C T C T C C C T C A C T C T A C A A G C T T C C A A G C T C C C A G A C C A T G A G 1023
 S P S Q E S P N A P T S T A V L G S W G 187
 T C T C C A A G C C A G G A G T C A C C C A A C G C C C A C A T C C A G C A G T G C T G G G A G C T G G G A 1083
 S P P Q P S L A P R E Q E A P G T Q W P 207
 T C C C A C C T C A G C C C A G C C T A G C A C C C A G A G A G C A G G C T C C T G G G A C C C A A T G G C C T 1143
 L D E T S G I Y Y T E I R E R E R E K S 227
 C T G G A T G A A A C G T C A G G A A T T A C T A C A G A A T C A G A G A G A G A G A G A A A T C A 1203
 E K G R P P W A A V V G T P P Q A H T S 247
 G A G A A A G G C A G G C C C C A T G G G C A G C G G T G A G A G A C C C C C A C A G G C G C C A C A C C A G C 1263
 L Q P H H H P W E P S V R E S L C S T W 267
 C T A C A G C C C C A C C A C C C A T G G G A G C C T T C T G T G A G A G A G C C T C T G T T C C A C A T G G 1323
 P W K N E D F N Q K F T Q L L L L Q R P 287
 C C C T G G A A A A A T G A G G A T T T A A C C A A A A T T C A C A C A G C T G C T A C T T C A A A G A C C T 1383
 H P R S Q D P L V K R S W P D Y V E E N 307
 C A C C C C A A G C C A A G A T C C C C T G G T C A A G A G A G C T G C C T G A T T A T G T G A G G A G A A T 1443
 R G H L I E I R D L F G P G L D T Q E P 327
 C G A G G A C A T T T A A T G A G A T C A G A G A C T T A T T T G G C C C A G G C C T G A T A C C C A A G A A C C T 1503
 R I V I L Q G A A G I G K S T L A R Q V 347
 C G C A T A G T C A T C T G C A G G G C T C C T G G A A T G G G A A G T C A A C A C T G C C A G G C A G G T G 1563

FIG. 1A

The first of these is the fact that the
 C_{60} molecule is a truncated icosahedron,
 which is a polyhedron with 32 faces,
 12 of which are pentagons and 20 are hexagons.
 This structure is highly symmetric,
 with a high degree of rotational symmetry.
 The second is the fact that the
 C_{60} molecule is a closed shell,
 meaning that it has a complete set of
 valence electrons, and therefore it is
 chemically inert. The third is the fact
 that the C_{60} molecule is a
 highly stable molecule, with a
 high melting point and a high
 boiling point.

1

AGG TGG GTC CCA GTC ACA GAT GGC TAT TGG CAG ATT CTC TTC TGG GTC CTC AAG GTC ACC 1943
 R N L K E L D L S G N S L S H S A V K S 327
 AGA AAC CTG AAG GAG CTG GAC CTA AGT GGA AAC TCG CTG AGC CAC TCT GCA GTG AAG AGT 3003
 L C K T L R R P R C L L E T L R L A G C 347
 CTT TGT AAG ACC CTG AGA CGC CCT CGC TGC CTC CTG GAG ACC CTG CGG TTG GCT GGC TGT 3063
 G L T A E D C K D L A F G L R A N Q T L 367
 GGC CTC ACA GCT GAG GAC TGC AAG GAC CTT GCC TTT GGG CTG AGA GCC AAC CAG ACC CTG 3123
 T E L D L S F H V L T D A G A K H L C Q 387
 ACC GAG CTG GAC CTG AGC TTC AAT GTG CTC AGG GAT GCT GGA GCC AAA CAC CTT TGC CAG 3183
 R L R Q P S C K L Q R L Q L V S C G L T 907
 AGA CTG AGA CAG CCG AGC TGC AAG CTA CAG CGA CTG CAG CTG GTC AGC TGT GGC CTC ACG 3243
 S D C C Q D L A S V L S A S P S L K E L 927
 TCT GAC TGC TGC CAG GAC CTG GCC TCT GTG CTT AGT GCC AGC CCC AGC CTG AAG GAG CTA 3303
 D L Q Q N N L D D V G V R L L C E G L R 947
 GAC CTG CAG CAG AAC AAC CTG GAT GAC GTT GGC CTG CGA CTG CTC TGT GAG GGG CTC AGG 3363
 H P A C K L I R L G L D Q T T L S D E M 967
 CAT CCT GCC TGC AAA CTC ATA CGC CTG GGG CTG GAC CAG ACA ACT CTG AGT GAT GAG ATG 3423
 R Q E L R A L E Q E K P Q L L I F S R R 987
 AGG CAG GAA CTG AGG GCC CTG GAG CAG GAG AAA CCT CAG CTG CTC ATC TTC AGC AGA CGG 3483
 K P S V M T P T E G L D T G E M S N S T 1007
 AAA CCA AGT GTG ATG ACC CCT ACT GAG GGC CTG GAT ACG GGA GAG ATG AGT AAT AGC ACA 3543
 S S L K R Q R L G S E R A A S H V A Q A 1027
 TCC TCA CTC AAG CGG CAG AGA CTC GGA TCA GAG AGG GCG GCT TCC CAT GTT GCT CAG GCT 3603
 N L K L L D V S K I F P I A E I A E E S 1047
 AAT CTC AAA CTC CTG GAC GTG AGC AAG ATC TTC CCA ATT GCT GAG ATT GCA GAG GAA AGC 3663
 S P E V V P V E L L C V P S P A S Q G D 1067
 TCC CCA GAG GTA GTA CCG GTG GAA CTC TTG TGC GTG CCT TCT CCT GCC TCT CAA GGG GAC 3723
 L H T K P L G T D D D F W G P T G P V A 1087
 CTG CAT ACG AAG CCT TTS GGG ACT GAC GAT GAC TTC TGG GGC CCC ACG GGG CCT GTG GCT 3783
 T E V V D K E K N L Y R V H F P V A G S 1107
 ACT GAG GTA GTT GAC AAA GAA AAG AAC TTG TAC CGA GTT CAC TTC CCT GTA GCT GGC JCC 3843
 Y R W P N T G L C F V M R E A V T V E I 1127
 TAC CGC TGG CCC AAC ACG GGT CTC TGC TTT GTG ATG AGA GAA GCG GTG ACC GTT CAG ATT 3903
 E F C V W D Q F L G E I N P Q H S W M V 1147
 GAA TTC TGT GTG TGG GAC CAG TTC CTG GGT GAG ATC AAC CCA CAG CAC AGC TGG ATG GTG 3963
 A G P L L D I K A E P G A V E A V H L P 1167
 GCA GGG CCT CTG CTG GAC ATC AAG GCT GAG CCT GGA GCT GTG GAA GCT GTG CAC CTC CTT 4023
 H F V A L Q G G H V D T S L F Q M A H F 1187
 CAC TTT GTG GCT CTC CAA GGG GGC CAT GTG GAC ACA TCC CTG TTC CAA ATG GCC CAC TTT 4083
 K E E G M L L E K P A R V E L H H I V L 1207
 AAA GAG GAG GGG ATG CTC CTG GAG AAG CCA GCC AGG GTG GAG CTG CAT CAC ATA GTT CTG 4143
 E N P S F S P L G V L L K M I H N A L R 1227
 GAA AAC CCC AGC TTC TCC CCC TTG GGA GTC CTC CTG AAA ATG ATC CAT AAT GCC CTC CGC 4203
 F I P V T S V V L L Y H R V H P E E V T 1247
 TTC ATT CCC GTC ACC TCT GTG GTG TTG CTT TAC CAC CGC GTC CAT CCT GAG GAA GTC ACC 4263

FIG. 1C

[illegible]

FIG. 1D

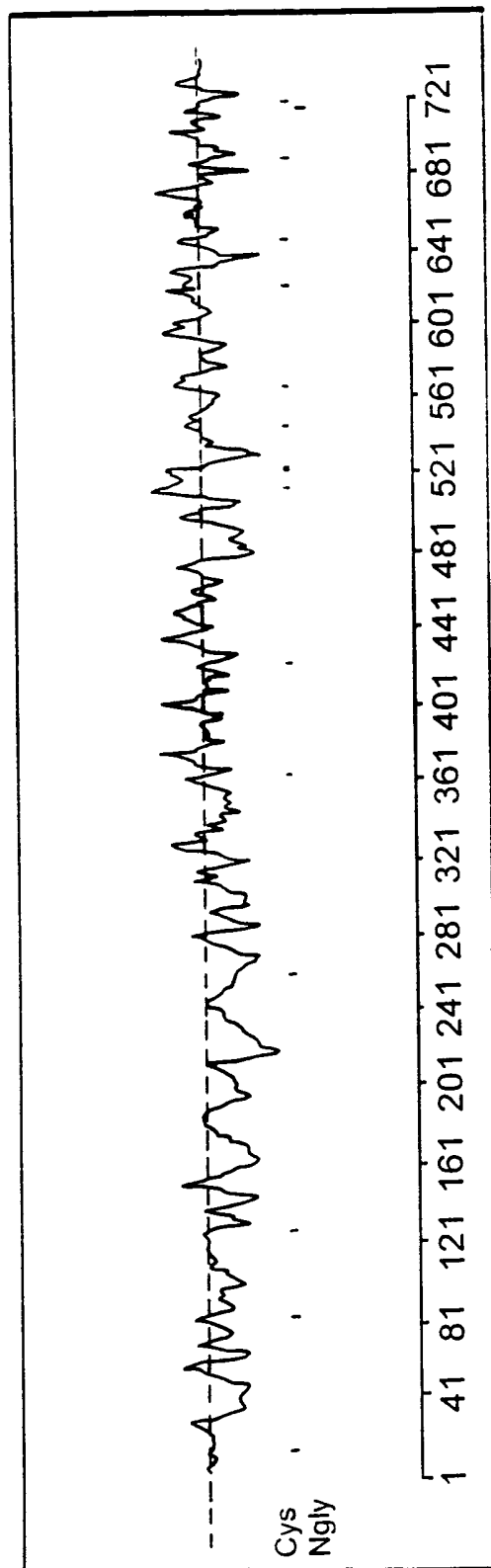
[illegible]

FIG. 2

Figure 1 displays a series of 15 plots for the protein p15, showing various domain predictions and physicochemical properties. The x-axis represents residue number, ranging from 0 to 1400.

The plots are organized as follows:

- Top 10 plots:** Domain predictions using Garnier-Robson and Chou-Fasman methods.
 - Alpha, Regions - Garnier-Robson
 - Beta, Regions - Garnier-Robson
 - Turn, Regions - Garnier-Robson
 - Coil, Regions - Garnier-Robson
 - Alpha, Regions - Chou-Fasman
 - Beta, Regions - Chou-Fasman
 - Turn, Regions - Chou-Fasman
 - Hydrophilicity Plot - Kyte-Doolittle
 - Hydrophobicity Plot - Kyte-Doolittle
 - Amphipathic Regions - Eisenberg
- Bottom 5 plots:**
 - Flexible Regions - Karplus-Schulz
 - Antigenic Index - Jameson-Wolf
 - Surface Probability Plot - Ermini

FIG. 3

TGCAAATGTGTGAGCATTTGCTTGTGAGCTTTTTTCAAGACAGGGTCTCAACTCTGTTACCCAGGCTGGAGT 4058
 GCAGTGGTGGGATCTCAGCTCACTGCAACCTCTGCTCTGCTTCAAGCGATTATTGTGCTCAGGCTCCTGAGTAGCT 4137
 GGGATTACAGGCATGCACCACCACAGCCAGCTAATTTTTGTATTTTAGTAGAGACAGAGTTTGCCTATGTTGGCCA 4216
 GGCTGGTTTTGAACTCCTGGCTCAAGTGATCCACCACCTCAGCCTCCCAAAGTGCTGGGATTACAGGCCACTACACC 4295
 TGGCACATTTGAGTATTTTTTTTTTTTTTTGAGATGGAGTCTGCTCTGTCTATCTAGGCTGGAGTGCAGTGG 4374
 TGTGATCTCAGCTCACTGCAGCTCTGTCTCCCGGGCTCAAGCGATTCTTGGCTCAGCCTCCTGAGTAGCTAGGACT 4453
 ACAGGTGCATGCCAACACGCCCGCTAATTTTTTAAAAAATATTTTAGTAGAGACAGGGTTTCACCATTTTGGCCAG 4532
 GATGGTCTCGATCTCCTGACCTCATGATCCACCGCTCGGCTTCCAAAGTGCTGGGATTACAGGCATGAGCCACCT 4611
 GCCTGGCTCATTTGAGTATTTTATAATGTCTCTTTAAAGTCTTGTGAGATAATTCACCTGTACATGTTATTCTAGT 4690
 GTTGGTGTCCACTGAGTTGTCAATTTCCAGACAAGTGGAGATTTTGCAGCTCATCTTGTATTCTCAGTAGTCCCA 4769
 TATGTACCTCGACATGTGAATGTTATCTTATGAGACTCTGTTTATTTGTATCCAACAGAAGATGTTTATTATTATT 4848
 TGGCTTTCTGTGAAGTGAAGTCTTAATATCAGCTCATTTTAAAGTCTTTGCAGTGGTATTCCGATCTATCCTGTGTGT 4927
 GCCTATGAGATTGGGTGCAGTGTATCCTGTTAGCTCCATTCTCAGGGCGTTTGAATGTGAATTAGGACCAGCGCAATGA 5006
 ATGCTCAAGTTGGGGTTGGGCTTAGAATTCATAAAAGTCTTTATATGCTCAG 5059

FIG. 4C

FIG. 5


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CARD8 P P F S G A - A F V K E N H R Q L Q A R M G D - - - L K G V L D D L Q D N E V L T E N E K E L V E
CARD7 L D A P Q L L H F V D Q Y R E Q L I A R V T - - S - V E V Y L D K L H G - Q V L S Q E Q Y E R V -
ASC S A A K P G L H F I D Q H R A A L I A R V T - - N - V E W L L D A L Y G - K V L T D E Q Y Q A V -
APAF1 M D A K A R N C L L Q - H R E A L E K D I K T S Y - - - I M D H M I S D G F L T I S E E E K V -
CARD4 E S - H P H I Q L L K S N R E L L V T H I R N T Q C L - - - Y D N L L K N D Y F S A E D A E I V C
CASP1 M A - - - D - K V L K E K R K L F I R S M G E G T - I N G L L D E L L Q T R V L N K E E M E K V K
RICK I A - Q Q W I Q - - - S K R E D I V N Q M T E A - C L N Q S L D A L L S R D L I M K E D Y E L V S

CARD8 Q E K - T R Q S K N E A L L S M V E K K G D L A L D V L F R S I S E - R D P Y L - V S Y L - R
CARD7 L A E N T R P S Q M R K L F S L S Q S W D R K C K D G L Y Q A L K E - T H P H L - I M E L - - W
ASC R A E P T N P S K M R K L F S F T P A W N W T C K D L L L Q A I R E - S Q S Y L - V E D L E R S
APAF1 R N E P T Q Q Q R A A M L I K M I L K K D N D S Y V S F Y N A L - - L H E G Y K D L A A L L H D
CARD4 - A C P T Q P D K V R K I L D L V Q S K G E E V S E F F L Y L L Q Q L A D A Y V D L R D W L L E
CASP1 R E N A T V M D K T R A L I D S V I P K G A Q A C Q I C I T Y I C E - E D S Y L - A G T L - G L
RICK - T K P T R T S K V R Q L L D T T D I Q G E E F A K V I V Q K L K D N K Q - - M G L Q P Y P E I

```

Fig. 7

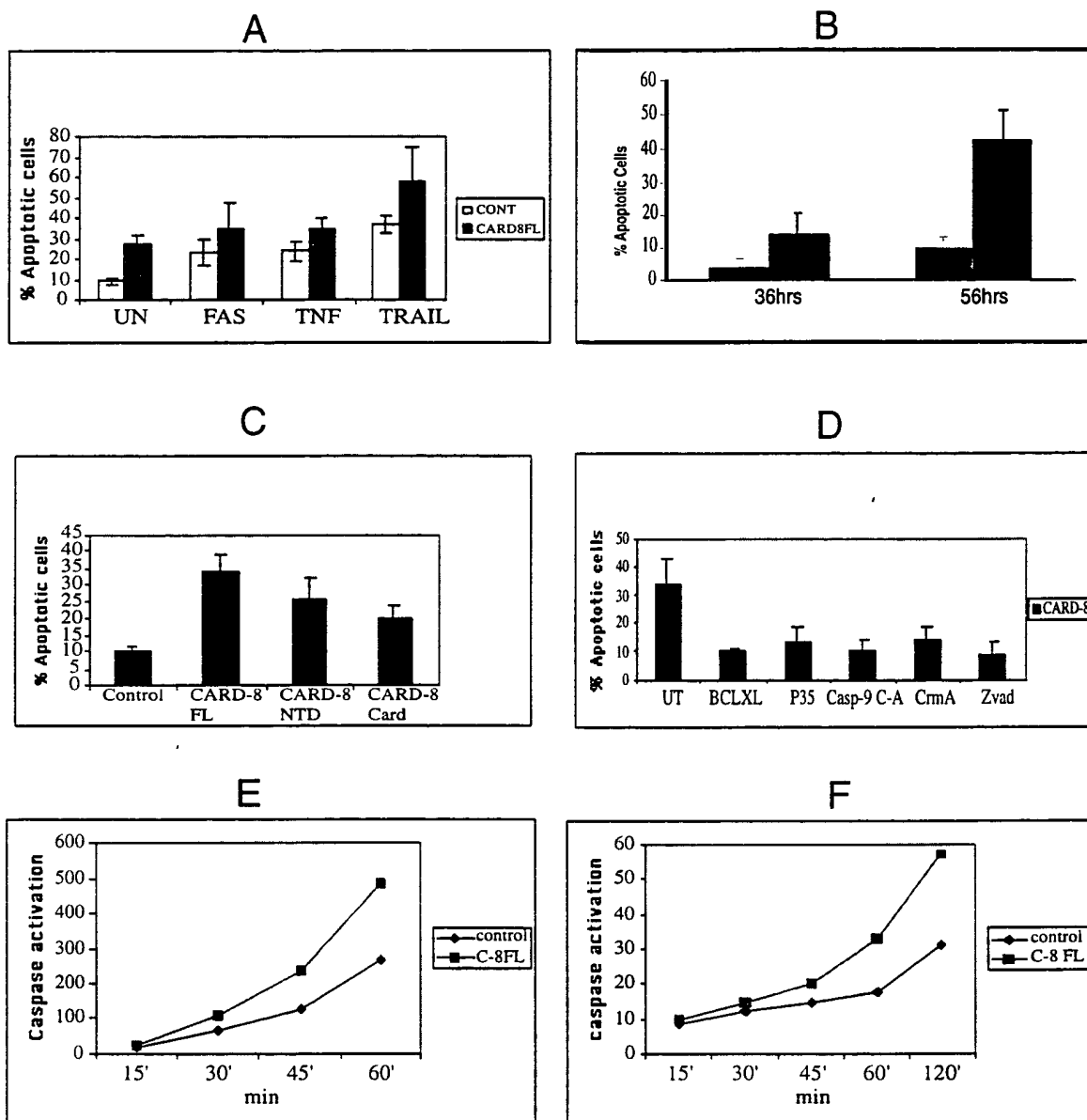


Fig. 8

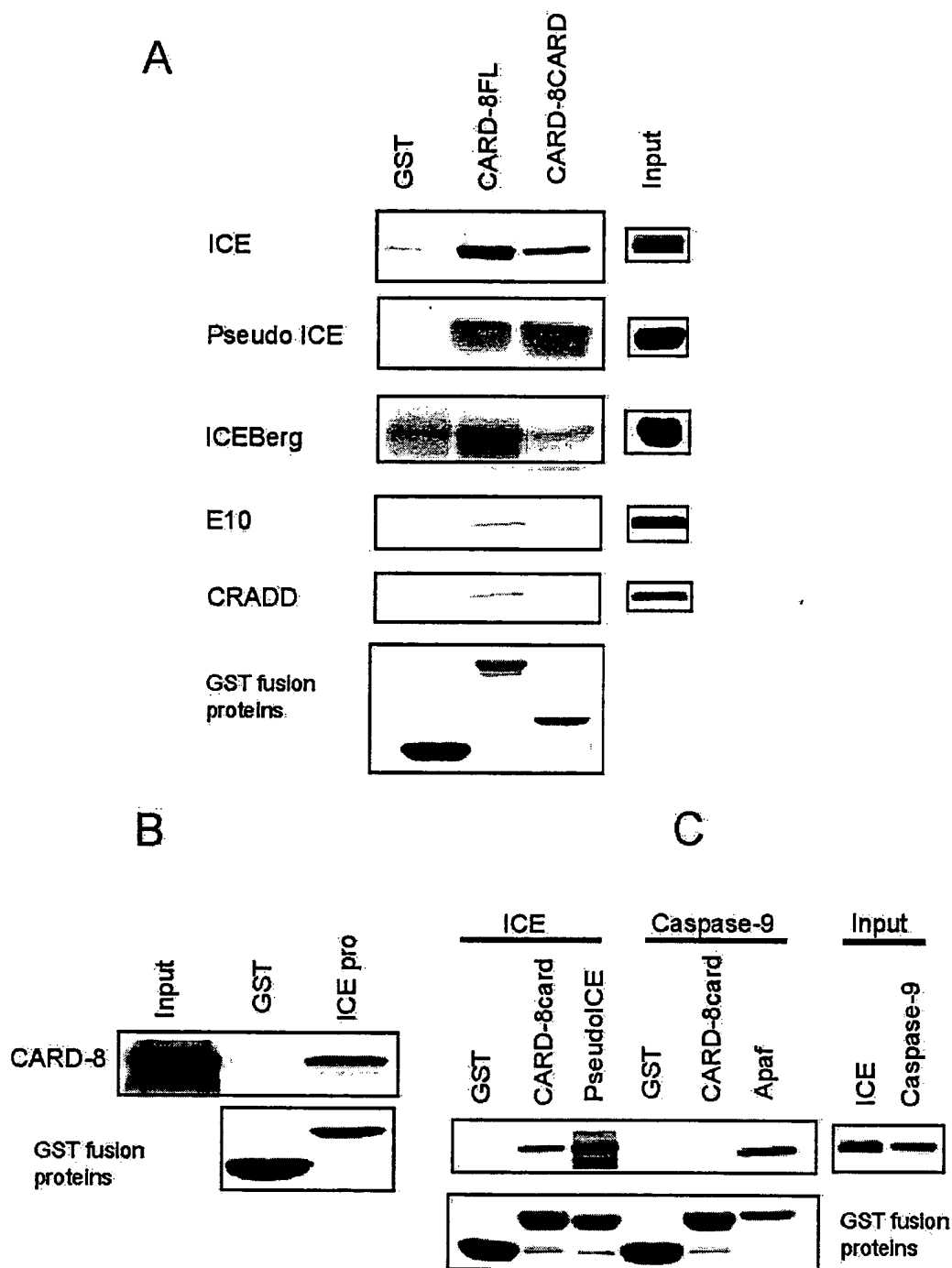
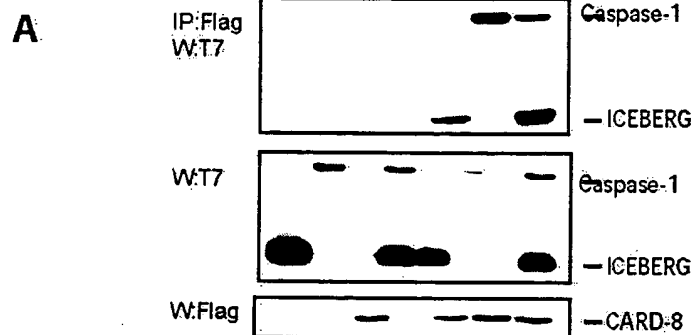


Fig. 9

T7 ICEBERG	+	-	-	+	+	-	+
T7Caspase-1 C-A	-	+	-	+	-	+	+
Flag CARD-8	-	-	+	-	+	+	+



T7Pseudo ICE	+	-	-	+	+	-	+
T7Caspase-1 C-A	-	+	-	+	-	+	+
Flag CARD-8	-	-	+	-	+	+	+

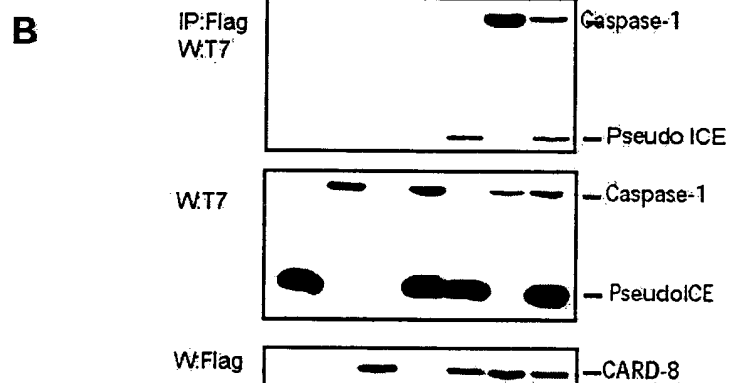


Fig. 10

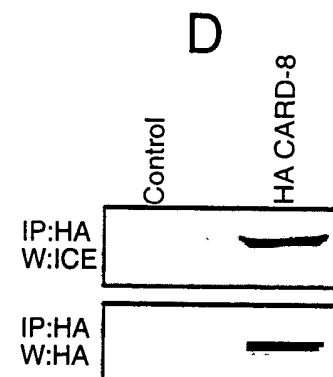
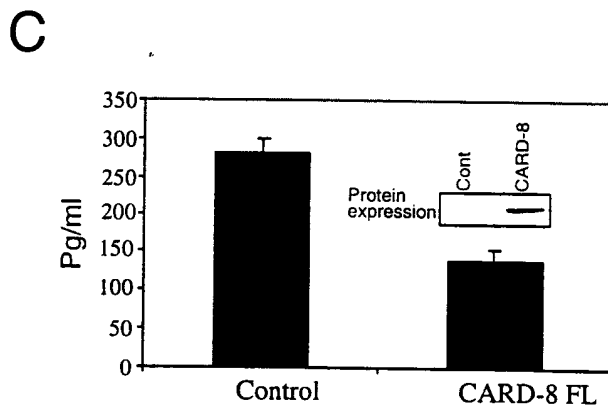
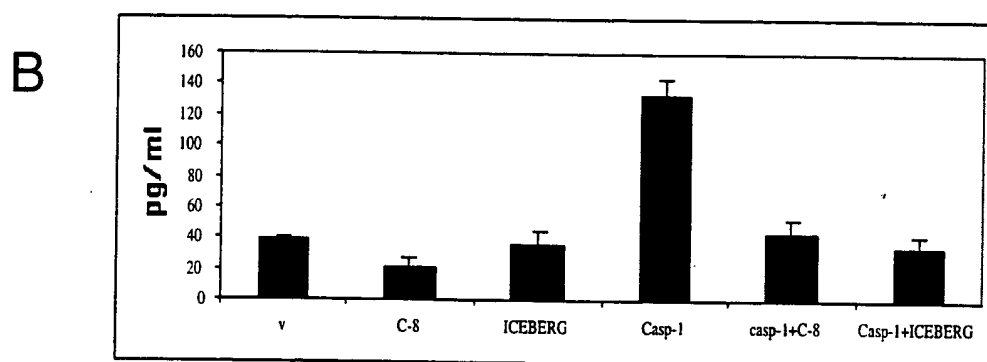
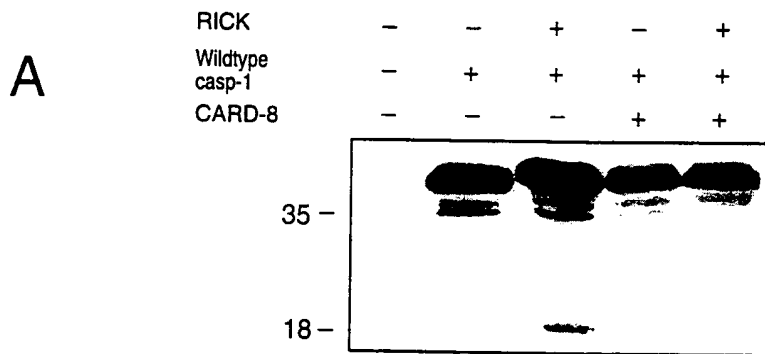


Fig. 11